

AMENDMENTS TO THE CLAIMS:

Without prejudice, this listing of claims will replace all prior versions and listings of the claims in the present application:

1-10. (Canceled).

11. (Currently Amended) A device for classifying at least one object with the aid of an environmental sensor system ~~(30)~~ of a vehicle,

wherein the device is configured such that the device classifies the at least one object ~~(11)~~ based on its object velocity (V_O) and object acceleration, the device determining the object velocity (V_O) and the object acceleration from at least one signal of the environmental sensor system ~~(30)~~, and

wherein the device is adapted to be coupled to a restraint system and is capable of controlling the restraint system as a function of the classification of the at least one object and a relative velocity of the at least one object relative to the vehicle.

12. (Currently Amended) The device as recited in Claim 11, wherein the object acceleration is determined based on at least one reference acceleration.

13. (Currently Amended) The device as recited in Claim 11, wherein the object acceleration is determined based on a time characteristic of a reference velocity (V_E) and of the object velocity (V_O).

14-16. (Canceled).

17. (Currently Amended) The device as recited in Claim 11, wherein the object velocity (V_O) is determined with the aid of a reference velocity (V_E).

18. (Currently Amended) The device as recited in Claim 12, wherein the object velocity (V_O) is determined with the aid of a reference velocity (V_E).

19. (Currently Amended) The device as recited in Claim 13, wherein the object velocity (~~VO~~) is determined with the aid of a reference velocity (~~VE~~).
20. (Currently Amended) The device as recited in Claim 14, wherein the object velocity (~~VO~~) is determined with the aid of a reference velocity (~~VE~~).
21. (Currently Amended) The device as recited in Claim 11, wherein the object velocity (~~VO~~) is determined on the basis of a time characteristic of location information.
22. (Currently Amended) The device as recited in Claim 12, wherein the object velocity (~~VO~~) is determined on the basis of a time characteristic of location information.
23. (Currently Amended) The device as recited in Claim 13, wherein the object velocity (~~VO~~) is determined on the basis of a time characteristic of location information.
24. (Currently Amended) The device as recited in Claim 14, wherein the object velocity (~~VO~~) is determined on the basis of a time characteristic of location information.
25. (Currently Amended) The device as recited in Claim 11, wherein the environmental sensor system (~~30~~) has at least one photonic mixer device.
26. (Currently Amended) The device as recited in Claim 12, wherein the environmental sensor system (~~30~~) has at least one photonic mixer device.
27. (Currently Amended) The device as recited in Claim 11, wherein the environmental sensor system (~~30~~) has a LIDAR system.
28. (Currently Amended) The device as recited in Claim 12, wherein the environmental sensor system (~~30~~) has a LIDAR system.

29. (Previously Presented) The device as recited in Claim 11, wherein the device is configured for outputting information to the driver, the output taking place as a function of the classification.

30. (Previously Presented) The device as recited in Claim 29, wherein the information is outputted haptically.

31. (New) The device of claim 11, wherein the device classifies the at least one object into at least one of a plurality of different object classes, including a vehicle class and a pedestrian class.

32. (New) The device of claim 11, wherein the controlling of the restraint system is also as a function of at least one additional crash parameter.

33. (New) A method for classifying at least one object with the aid of an environmental sensor system of a vehicle, the method comprising:

classifying the at least one object based on an object velocity and an object acceleration of the at least one object;

determining the object velocity and the object acceleration from at least one signal of the environmental sensor system; and

controlling a restraint system as a function of the classification of the at least one object and a relative velocity of the at least one object relative to the vehicle.